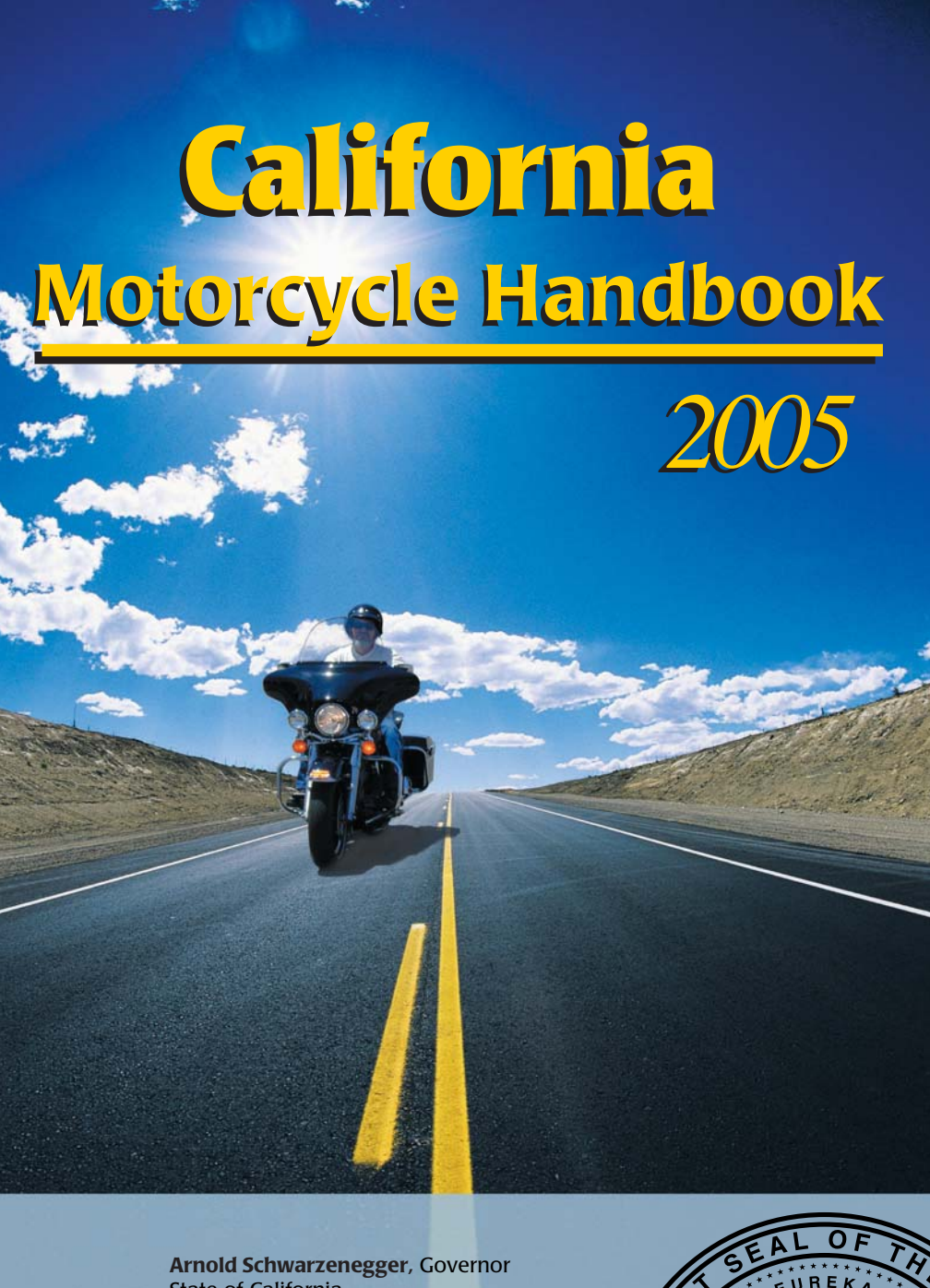
California
Motorcycle Handbook
2005



Arnold Schwarzenegger, Governor
State of California
Sunne Wright McPeak, Secretary
Business, Transportation and Housing Agency
Joan Borucki, Director
Department of Motor Vehicles

STATE OF CALIFORNIA
DEPARTMENT OF MOTOR VEHICLES

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INTRODUCTION

This booklet supplements the *California Driver Handbook* concerning traffic laws, safe driving rules, and driver licenses. Study the *California Driver Handbook* as well as this supplement.

This supplement provides information for both novice and experienced drivers of two-wheel vehicles. Portions of this booklet which deal with safe driving practices (rather than traffic laws) were developed initially by the National Public Services Research Institute in cooperation with the Motorcycle Safety Foundation (MSF).

The Motorcycle Safety Foundation, California Highway Patrol (CHP), California Motorcyclist Safety Program, various motorcyclist enthusiast groups, and the Department of Motor Vehicles (DMV) all agree that improved licensing, along with quality motorcycle rider education and increased public awareness, has the potential to reduce the number and severity of motorcycle accidents.

When using this handbook, remember that it is only a summary of the laws and regulations. DMV, law enforcement, and courts follow the full and exact language of the law contained in the *California Vehicle Code*.

TWO-WHEEL VEHICLE OPERATION

The basic rules of the road contained in the *Vehicle Code* apply to all two-wheel vehicles which include motorcycles, motor-driven cycles, mopeds, or bicycles with a motor attached. Minibikes, tote-goats, trail bikes, and similar vehicles may fall within the definition of motorcycle, motor-driven cycle, or motorized bicycle. If any of these vehicles are operated on a highway, they must meet applicable equipment, registration, licensing, and operation requirements, if required.

Do **not** ride a moped on a freeway, bicycle path or trail, equestrian (horse) trail, hiking trail, or recreational trail unless that path or trail is on or next to a road or permission to use the trail or roadway is granted by local law.

MOTORCYCLES

A motorcycle:

- Has a seat or saddle for the rider; is designed to travel on not more than three wheels; and weighs less than 1,500 pounds. *A farm tractor is not a motorcycle*. **Exception**: A motorcycle with a two-wheeled sidecar weighing less than 1,500 pounds is also considered a motorcycle.

DMV INFORMATION

DMV field offices have varying business hours and days of service. A few offices offer only driver license or vehicle registration service. Call one of the toll-free numbers below or go online to find the locations and business hours of an office near you.

DMV has two TOLL-FREE telephone numbers.

- Call 1-800-777-0133 between 8 AM and 5 PM to:
  - Get driver license and vehicle registration information, forms, and publications.
  - Find office locations and hours.
  - Make a driving test appointment.
  - Speak to a DMV representative.
- Call 1-800-921-1117, 24 hours a day, 7 days a week, to:
  - Access DMV's voice recognition system.
  - Renew your vehicle registration using a credit card and the Renewal Identification Number provided on your billing notice.
  - Make a non-driving test appointment.

Go online at: www.dmv.ca.gov for information about:

- Field offices—locations, hours, directions, phone numbers
- Ordering personalized plates
- Driver license and identification card information
- Vehicle/vessel registration information
- Forms—for downloading
- Publications—handbooks, brochures, sample tests
- Links to other state and federal agencies
- Much more

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If you would like to advertise in this publication, please call the Office of State Publishing Advertising Department 1-866-824-0603.

- Can also be electrically powered with a maximum speed of 45 miles per hour and weigh less than 2,500 pounds.

MOTOR-DRIVEN CYCLES

A motor-driven cycle is:

- A motorcycle with a 149 cc or less engine size.

NOTE: You may not operate a motor-driven cycle on a freeway if signs are posted to prohibit motor-driven cycle operation.

MOTORIZED BICYCLES

There are two definitions of motorized bicycle (moped). A motorized bicycle is:

- A two- or three-wheeled device, capable of no more than 30 mph on level ground, and equipped either with:
  - —fully operative pedals for human propulsion.
  - —an internal combustion engine producing less than two gross brake horsepower and an automatic transmission.
  - —an electric motor, with or without pedals for human propulsion. (VC §406[a])
- A vehicle with pedals and an electric motor (not more than 1,000 watts) which cannot be driven at speeds of more than 20 mph on level ground even if assisted by human power. The motor must stop when the brakes are applied or the starter switch is released. (VC §406[b])

If you operate a motorized bicycle **which meets the definition of VC §406(b), you:**

- Must be 16 years of age or older.
- Must wear a properly fitted and fastened bicycle helmet.
- Are exempt from the motor vehicle financial responsibility, driver license, and moped plate requirements. (VC §12804.9)

You may ride a moped in a bicycle lane at a reasonable speed. Be careful of bicyclists using the lane.

MOTORIZED SCOOTER

Starting January 1, 2005, you must have a Class C driver license to operate a motorized scooter. A Class M1 or M2 license no longer meets the requirements for a motorized scooter.

A motorized scooter is defined as any two-wheeled “device” with:

- a motor, handlebars, and a floorboard for standing on when riding, and
- the options of having:
  - —a driver seat which cannot interfere with the operator’s ability to stand and ride
  - —the ability to be powered by human propulsion

The motorized scooter’s exhaust system must not be modified or altered.

LICENSE REQUIREMENTS

California issues the following license classes for two-wheel vehicle operation:

- Class M1—You may operate any two-wheel motorcycle or motor-driven cycle and all vehicles listed under Class M2.
- Class M2—You may operate any motorized bicycle or any bicycle with an attached motor.
- Class C —You may operate a motorcycle with a sidecar attached, a three-wheel motorcycle, or a motorized scooter.

You may obtain a Class M1 or M2 license at any DMV office which provides driver license services. Motorcycle law tests and skill tests are required.

NOTE: The permit and license requirements in this supplement pertain to two-wheel vehicles.

EARNING YOUR LICENSE

Safe riding requires knowledge and skill. Testing two-wheel vehicle operators is the best measurement of the skills necessary to operate safely in traffic because people often overestimate their own abilities. DMV's licensing exams are designed to be scored objectively.

To obtain your license, you must pass a knowledge test and an on-cycle skill test. Knowledge test questions are based on information, practices, and ideas from this manual. They require that you know and understand road rules and safe riding practices. An on-cycle skill test will either be conducted in an actual traffic environment or in a controlled off-street area.

APPLICATION REQUIREMENTS—ALL DRIVERS

These are the requirements if you already have a basic class driver license. Refer to the *California Driver Handbook* for basic class driver license requirements.

To obtain an instruction permit to operate an M1/M2 vehicle on public roads, you must:

- Submit a completed DMV application form (DL 44).
- Pay the required $25 application fee.
- Pass an eye exam.
- Have your picture taken.
- Give a thumb print.
- Pass a test(s) on traffic laws and signs for the class of license you now have unless you have taken the test(s) within the prior twelve months.
- Pass an additional law test on motorcycle driving rules.

NOTE: The Class M1/M2 permit does not allow you to carry passengers and you must ride during daylight hours only and not on a freeway.

MINORS' M1/M2 PERMIT REQUIREMENTS

To obtain a Class M1/M2 permit, you must:

- Be 15 ˚ years of age and bring proof you have finished both driver education and driver training. (DL 387, DL 388, DL 388A, OL 237, or OL 238).
- Complete the application requirements.
- Have your parents' * signatures on the application form.

ADULTS' M1/M2 PERMIT REQUIREMENTS

To obtain a Class M1/M2 instruction permit, you must:

- Complete the application requirements.
- Be 18 years of age, or older.

LICENSE REQUIREMENTS— ALL DRIVERS

To obtain a Class M1/M2 license, you must:

- Complete the application and permit requirements listed above.
- If you are under 21 years of age, provide a certificate of Completion of Motorcycle Training (DL 389) from a CHP-approved motorcycle rider training course. The skill test is waived for any person presenting a DL 389. Motorcycle training sites are located throughout California. Locate the nearest training site by calling 1-877-RIDE411.
- Pass a DMV skill test or present a DL 389.
- Pass a road test, if you are applying for a Class M1/M2 license only.

MINOR'S M1/M2 LICENSE REQUIREMENTS

To obtain a Class M1/M2 license, you must:

- Complete the requirements listed above.
- Be at least 16 years old.

ADULT'S M1/M2 LICENSE REQUIREMENTS

To obtain a Class M1/M2 license, you must:

- Complete the requirements listed above.
- Be at least 18 years old.

ON-CYCLE SKILL TEST

Basic vehicle control and crash-avoidance skills are included in on-cycle tests to determine your ability to handle normal and hazardous traffic situations.

You may be tested for your ability to:

- Know your motorcycle and your riding limits.
- Accelerate, brake, and turn safely.
- See, be seen, and communicate with others.
- Adjust speed and position to the traffic situation.
- Stop, turn, and swerve quickly.

* The term parents means both custodial parents unless only one parent has custody, or all legal guardians unless only one legal guardian has custody.

- Make critical decisions and carry them out.

Examiners may score on factors related to safety such as:

- Selecting safe speeds to perform maneuvers.
- Choosing the correct path and staying within boundaries.
- Completing normal and quick stops.
- Completing normal and quick turns or swerves.

PREPARING TO RIDE

What you do before you start a trip goes a long way toward determining whether you'll get where you want to go safely. Before starting any trip, a safe rider makes a point to:

- Wear the right gear.
- Become familiar with the motorcycle.
- Check the motorcycle equipment.
- Be a responsible rider.

WEARING THE RIGHT GEAR

When you ride, your gear is "right" if it protects you. In any crash, you have a far better chance of avoiding serious injury when you wear:

- An approved helmet.
- Face or eye protection.
- Protective clothing.

Helmet Use

Crashes can occur—particularly among new riders. One out of every five motorcycle crashes result in head or neck injuries with head injuries being far more common. All operators and passengers must wear an approved safety helmet when riding on a motorcycle, motor-driver cycle, or motorized bicycle. Research shows that head and neck injuries account for a majority of serious and fatal motorcyclist injuries and that with few exceptions, head and neck injuries are reduced by properly wearing an approved helmet. Here are some facts to consider.

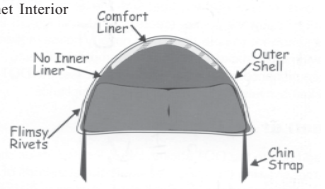
- An approved helmet lets you see as far to the sides as necessary.
- Most crashes happen on short trips (less than five miles long) just a few minutes after starting out.
- Most riders are riding slower than 30 mph when a crash occurs. At these speeds, helmets can cut both the number and the severity of head injuries by half.

No matter what your speed in a crash, if you are wearing a helmet you are three times more likely to survive a head injury than if you aren't wearing one.

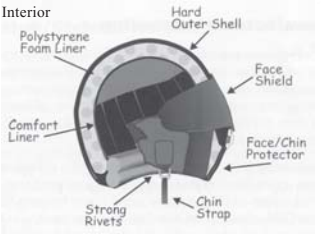
Helmet Selection

There are two primary types of helmets which provide two different levels of coverage: three-quarter and full face.

Unsafe Helmet Interior



Safe Helmet Interior



Whichever style you choose, you get the most protection by making sure the helmet:

- Meets U.S. Department of Transportation (DOT) and state standards. Helmets with a label from the Snell Memorial Foundation give you an added assurance of quality.
- Fits snugly, all the way around.
- Has no obvious defects such as cracks, loose padding or frayed straps.

Keep your helmet securely fastened on your head when you ride. Otherwise, if you are involved in a crash, it's likely to fly off your head before it gets a chance to protect you.

Eye and Face Protection

A plastic shatter-resistant face shield can help protect your whole face in a crash. It also protects you from wind, dust, dirt, rain, insects, and pebbles thrown up from the vehicles ahead. If you don't have to deal with these types of problems, you can devote your full attention to the road.

Goggles protect your eyes, but they don't protect the rest of your face like a face shield does. A windshield is not a substitute for a face shield or goggles. Most windshields will not protect your eyes from the wind. Neither will eyeglasses or sunglasses. Glasses won't keep your eyes from watering, and they might blow off when you turn your head.

To be effective, eye or face shield protection must:

- Be free of scratches.
- Be resistant to penetration.
- Give a clear view to either side.
- Fasten securely, so it does not blow off.
- Permit air to pass through, to reduce fogging.
- Permit enough room for eyeglasses or sunglasses, if needed.

Tinted eye protection should not be worn at night or any other time when little light is available.

Clothing

The right clothing protects you in a collision. It also provides comfort, as well as protection from heat, cold, debris, and the hot and moving parts of the motorcycle.

- Jacket and pants should cover arms and legs completely. They

should fit snugly enough to keep from flapping in the wind, but still allow you to move freely. Leather or a sturdy synthetic material offers the most protection. Wear a jacket even in warm weather to prevent dehydration. Many are designed to protect without getting you overheated, even on summer days.

- Boots or shoes should be high and sturdy enough to cover your ankles and support them. Soles should be made of hard, durable, slip-resistant material. The heels should be short so they do not catch on rough surfaces. Tuck in laces so they won't catch on your motorcycle.
- Gloves allow a better grip and help protect your hands. Your gloves should be made of leather or similar durable material.

In cold or wet weather, your clothes should keep you warm and dry, as well as protect you from injury. You cannot control a motorcycle well if you are numb. Riding for long periods in cold weather can cause severe chill and fatigue. A winter jacket should resist wind and fit snugly at the neck, wrists, and waist. Good-quality rain suits designed for motorcycle riding resist tearing apart or ballooning up at high speeds.

KNOW YOUR MOTORCYCLE

There are many things on the highway that can cause you trouble. Your motorcycle should not be one of them. To make sure that your motorcycle won't let you down:

- Read the owner's manual first.
- Start with the right motorcycle for you.
- Be familiar with the motorcycle controls.
- Check the motorcycle before every ride.
- Keep it in safe riding condition between rides.
- Avoid add-ons and modifications that make your motorcycle harder to handle.

The Right Motorcycle

First, make sure your motorcycle "fits" you. Your feet should reach the ground while you are seated on the motorcycle.

At minimum, your street-legal motorcycle must have:

- Headlight, taillight, brake light, and turn signals.
- Front and rear brakes.
- A horn and two mirrors.

Borrowing and Lending

Crashes are fairly common among new riders. Riding an unfamiliar motorcycle adds to the problem. If you borrow a motorcycle, get familiar with it in a controlled area. If you lend your motorcycle, make sure the person is licensed

and knows how to ride before you allow him/her to ride in traffic.

No matter how experienced you may be, ride extra carefully on any motorcycle that's new or unfamiliar to you. More than half of all crashes occur on motorcycles ridden by the operator for less than six months.

Get Familiar With The Motorcycle Controls

Be completely familiar with the motorcycle before you take it out on the street.

If you use an unfamiliar motorcycle:

- Make all the checks you would on your own motorcycle.
- Find out where everything is, particularly the turn signals, horn, headlight switch, fuel-supply valve, and engine cut-off switch. You should be able to find them without having to look for them.
- Know the gear pattern. Work the throttle, clutch and brakes a few times before you start riding. All controls react a little differently.
- Ride very cautiously and be aware of your surroundings. Accelerate gently, take turns more slowly, and leave extra room for stopping.

Check Your Motorcycle

A motorcycle needs more frequent attention than a car. If something's wrong with the motorcycle, you'll want to find out about it before you get in traffic. Make the following checks before every ride:

- **Tires**—Check the air pressure, general wear, and tread.
- **Fluids**—Oil and fluid levels. At a minimum, check hydraulic fluids and coolants weekly. Look under the motorcycle for signs of an oil or gas leak.
- **Headlights and Taillight**—Check them both. Test your switch to make sure both high and low beams work.
- **Turn Signals**—Turn on both right and left turn signals. Make sure all lights work properly.
- **Brake Light**—Try both brake controls and make sure each one turns on the brake light.

Once you are on the motorcycle, complete the following checks before starting out:

- **Clutch and Throttle**—Make sure they work smoothly. The throttle should snap back when you let go. The clutch should feel tight and smooth.
- **Mirrors**—Clean and adjust both mirrors before starting. Adjust each mirror so you can see the lane behind and as much as possible of the lane next to you. When properly adjusted, a mirror may show the edge of your arm or shoulder—but it's the road behind and to the side that is most important.

- **Brakes**—Try the front and rear brake levers one at a time. Make sure each one feels firm and holds the motorcycle when the brake is fully applied.
- **Horn**—Make sure the horn works.

In addition to the checks before every trip, check the following items at least once a week: Wheels, cables, fasteners, and fluids. Follow the manufacturer's recommendations.

KNOW YOUR RESPONSIBILITIES

"Accident" implies an unforeseen event that occurs without anyone's fault or negligence. Most often in traffic, that is not the case. In fact, most people involved in a crash can usually claim some responsibility for what takes place.

Blame doesn't matter when someone is injured in a crash. There is rarely a single cause of any crash. The ability to be aware, make critical decisions, and carry them out separates responsible riders from all the rest. It is up to you to keep from being the cause of, or an unprepared participant in, any crash.

As a rider, you can't be sure that others will see you or yield the right of way. To reduce the chances of a crash:

- **Be visible**. Wear proper clothing, use your headlight, ride in the best lane position to see and be seen.
- **Communicate your intentions**. Use the proper signals, brake light, and lane position.
- **Maintain an adequate space cushion**. Allow yourself enough space when following, being followed, lane sharing, passing, and being passed.
- **Scan your path** of travel. Look at least 10 to 15 seconds ahead.
- **Identify and separate** multiple hazards.
- **Be prepared to act**. Remain alert and know how to carry out proper crash-avoidance skills.

RIDE WITHIN YOUR ABILITIES

This manual cannot teach you how to control direction, speed, or balance. You learn this only through practice and by knowing your abilities and riding within them.

BASIC VEHICLE CONTROL

Body Position

To control a motorcycle well:

- **Posture**—Sit so you can use your arms to steer the motorcycle rather than to hold yourself up.
- **Seat**—Sit far enough forward so your arms are slightly bent when holding the handlegrips. Bending your arms permits you to press on the handlebars

without having to stretch.

- **Hands**—Hold the handlegrips firmly. Start with your right wrist flat so you won't accidentally use too much throttle. Also, adjust the handlebars so your hands are even with or below your elbows. This allows you to use the proper muscles for precision steering.
- **Knees**—Keep your knees against the gas tank to help with your balance as you turn the motorcycle.
- **Feet**—Keep your feet firmly on the footpegs for balance. Don't drag your feet or you could be injured and lose control of the motorcycle. Keep your feet near the controls. Also, don't point your toes downward—they may get caught between the road and the footpegs.

Shifting Gears

There is more to shifting gears than simply getting the motorcycle to pick up speed smoothly. Learning to use the gears when downshifting, turning, or starting on hills is important for safe motorcycle operation.

Shift down through the gears with the clutch as you slow or stop. Remain in first gear while stopped so you can move out quickly if needed.

Ride slowly enough when you shift into a lower gear or the motorcycle will lurch and the rear wheel may skid. When riding downhill or shifting into first gear you may need to slow to downshift safely. Work toward a smooth, even clutch release especially when downshifting.

It is best to change gears before starting a turn. However, sometimes you may need to shift while in the turn. Remember to shift smoothly because a sudden change in power to the rear wheel can cause a skid.

Braking

Your motorcycle has two brakes: one each for the front and rear wheel. Use both brakes at the same time. The front brake is more powerful and can provide at least three-quarters of your total stopping power. The front brake is safe to use when you use it properly.

Remember:

- Use both brakes every time you slow or stop. Using both brakes for "normal" stops permits you to develop the proper habit and skill of using both brakes properly, which you may need in an emergency. Squeeze the front brake and press down on the rear brake. Grabbing at the front brake or jamming down on the rear brake can cause the brakes to lock and result in control problems.
- If you know the technique, using both brakes in a turn is possible, although it should be done very carefully. When you

lean the motorcycle some of the traction is used for cornering and less traction is available for stopping. A skid can occur if you apply too much brake. Also, using the front brake incorrectly on a slippery surface may be hazardous. Use caution and squeeze the brake lever, never "grab" it.

- Some motorcycles have integrated braking systems that link the front and rear brakes together when you apply the rear brake pedal. (Consult your owner's manual.)

Turning

Riders often try to take curves or turns too fast. When they can't hold the turn, they end up crossing into another lane of traffic or going off the road. Or, they overreact and brake too hard causing a skid and loss of control. Approach turns and curves with caution.

Use four steps for better control:

1 **Slow**—Reduce your speed before the turn by closing the throttle and, if necessary, applying both brakes.

2 **Look**—Look through the turn to where you want to go. Turn only your head, not your shoulders, and keep your eyes level with the horizon.

3 **Press**—To turn, the motorcycle must lean. To lean the motorcycle, press on the handlegrip in the direction of the turn. Press left—lean left—go left. Press right—lean right—go right. Higher speeds and/or tighter turns require the motorcycle to lean more.

4 **Roll**—Roll on the throttle through the turn to stabilize suspension. Maintain steady speed or accelerate gradually through the turn. This will help keep the motorcycle stable.

In normal turns, the rider and the motorcycle should lean together at the same angle.

In slow tight turns, the rider should keep his/her body straight and only lean the motorcycle.

KEEPING YOUR DISTANCE

The best protection you can have is distance—a "cushion of space"—all around your motorcycle. If someone else makes a mistake, distance gives you:

- Time to react.
- Space to maneuver.

Lane Positions

In some ways the size of the motorcycle can work to your advantage. Each traffic lane gives a motorcycle three paths of travel, as indicated in the illustration.

Your lane position should:

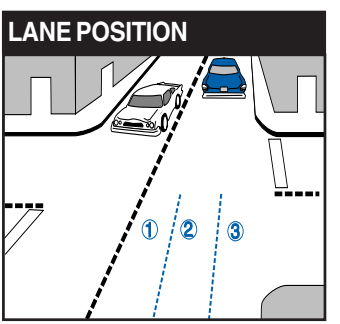
- Increase your ability to see and be seen.
- Avoid others' blind spots.
- Protect your lane from other drivers.

- Communicate your intentions.
- Help you avoid wind blasts from other vehicles.
- Provide an escape route.

Select the appropriate lane position to maximize your space cushion and make yourself more visible to others on the road.

In general, there is no "best lane position" for riders in which to be seen and to maintain a space cushion around the motorcycle. Position yourself in the lane that allows the most visibility and space around you. Change your lane position as traffic situations change. Only ride in paths 2 or 3 if vehicles and other potential problems are on your left side. If vehicles are on both sides of you, the center of the lane (path 2) is usually the best option.

The oily strip in the center portion of the lane is usually no more than two feet wide. Unless the road is wet, the average oily center strip permits adequate traction on which to ride safely. You can ride just to the left or right of the oily strip and still be within the center portion of the traffic lane. However, avoid riding on large oil and grease buildups which are usually found at busy intersections or toll booths.



Following Another Vehicle

"Following too closely" (tailgating) could be a factor in crashes involving motorcyclists. In traffic, motorcycles need as much distance to stop as cars. Normally, you should maintain a two-second following distance.

To gauge your following distance:

- Ahead of you, pick out a marker such as a pavement marking or lamp post.
- When the rear bumper of the vehicle ahead of you passes the marker, count off the seconds: "one-thousand-one, one-thousand-two."
- If you reach the marker before you reach "two," you are following too closely.

A two-second following distance gives you a minimum amount of space to stop or swerve, if the driver ahead stops suddenly. It also gives you a better view of potholes and other road hazards.

You will need a larger space cushion if your motorcycle takes longer than normal to stop. Open up a three-second or more following distance when the pavement is slippery, or you cannot see through the vehicle ahead, or traffic is heavy, or

someone may squeeze in front of you.

When you are stopped, keep well behind the vehicle ahead of you. This will make it easier to get out of the way if a driver behind you is traveling too quickly or the vehicle ahead starts to back up.

When behind a vehicle, ride where the driver can see you in his/her rearview mirror. If you ride in the center portion of the lane, your image should be in the middle of the driver's rearview mirror—where he/she is more likely to see you.

If you ride in the left or right portion of the lane, the driver may see you in his/her side view mirror. But remember that most drivers don't look at their side view mirrors as often as they check the rearview mirror. So if the traffic situation allows, the center lane position is usually the best place for you to be seen by the driver ahead and to prevent lane sharing by others.

Being Followed

When you speed up to lose a tailgater, you only end up with someone tailgating you at a higher speed.

A better way to handle tailgaters is to allow them to pass you. If you can't do this, slow down and open up extra space ahead of you which will allow space for both you and the tailgater to stop. This will also encourage the tailgater to pass. But if the tailgater doesn't pass, you have at least given yourself and the tailgater more time and space to react in case an emergency develops.

Passing and Being Passed

Passing and being passed by a larger vehicle is not much different than with a smaller passenger vehicle. However, visibility is more critical. Be sure other drivers see you and that you see potential hazards.

Passing

1. Ride in the left portion of your lane at a safe following distance to increase your line of sight and make you more visible. Signal and check for oncoming traffic. Use your mirrors and turn your head to look for traffic behind.
2. When safe, move into the left lane and accelerate. Select a lane position that doesn't crowd the car you are passing and provides space to avoid hazards in your lane.
3. Ride through the driver's blind spot as quickly as possible.
4. Signal again and complete mirror and head checks before returning to your original lane. Then cancel your turn signal.

Remember, passing must be completed within posted speed limits, and only where permitted.

Being Passed

When you are being passed from behind or by an oncoming vehicle, stay in the center portion

of your lane. Riding any closer could put you in a hazardous situation.

Avoid being hit by:

- **The other vehicle**—A slight mistake by you or the passing driver could cause a sideswipe.
- **Extended mirrors**—Some drivers forget that their mirrors hang out farther than their fenders.
- **Objects thrown from windows**—Even if the driver knows you are there, a passenger may not see you and might toss something on you or the road ahead of you.
- **Blasts of wind** from larger vehicles—They can affect your control. You have more room for error if you are in the middle portion of the lane when hit by this blast than if you are on either the left or right portions of the lane.

Do not move into the portion of the lane farthest from the passing vehicle. It might invite the other driver to move back into your lane too early.

Lane Sharing

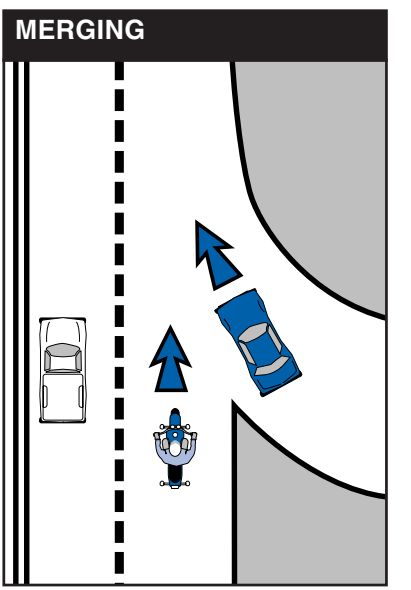
Cars and motorcycles each need a full lane to operate safely. Lane sharing is **not** safe.

Riding between rows of stopped or moving cars in the same lane can leave you vulnerable. A car could turn suddenly or change lanes, a door could open, or a hand could come out of a window. Discourage lane sharing by others. Keep a center-portion position whenever drivers might be tempted to squeeze by you. Drivers are most tempted to do this:

- In heavy, bumper-to-bumper traffic.
- When they want to pass you.
- When you are preparing to turn at an intersection.
- When you are getting in an exit lane or leaving a highway.

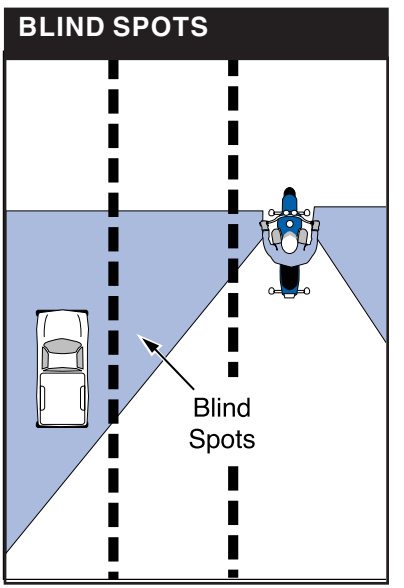
Merging Cars

Drivers on an entrance ramp may not see you on the highway. Give them plenty of room. Change to another lane if one is open. If there is no room for a lane change, adjust your speed to open up space for the merging driver.



Cars Alongside

Do not ride next to passenger vehicles or trucks in other lanes *if you don't have to* because you might be in the driver's blind spot. The driver could change lanes without warning. Also, vehicles in the next lane can block your escape if you come upon danger in your own lane. Speed up or drop back to find a place clear of traffic on both sides.



SEARCH, EVALUATE, and EXECUTE (SEE)

Experienced riders remain aware of what is going on around them. They improve their riding strategy by using SEE, a three-step process for making appropriate judgments and applying them correctly in different traffic situations. SEE stands for: **S**earch, **E**valuate, and **E**xecute.

Search

Actively search ahead, to the sides, and behind to help you avoid potential hazards. How you search and how much time and space you have, can eliminate or reduce harm. Focus even more on finding potential escape routes in or around intersections, shopping areas, or school and construction zones.

Search for factors such as:

- Oncoming traffic that may turn left in front of you.
- Traffic coming from either the left, right, or behind.
- Hazardous road conditions.

Evaluate

Think about how hazards can create risks for you. Anticipate potential problems and have a plan to reduce risks.

- Road and surface characteristics such as potholes, guardrails, bridges, telephone poles and trees won't move into your path but may influence your riding strategy.
- Traffic control devices such as traffic signals, regulatory signs, warning signs, and pavement markings will help you evaluate circumstances ahead.
- Vehicles and other traffic may

move into your path and increase the likelihood of a crash.

Think about your time and space requirements in order to maintain a margin of safety. You must leave yourself time to react if an emergency arises.

Execute

Carry out your decision. To create more space and minimize harm from any hazard:

- Communicate your presence with lights and/or your horn.
- Adjust your speed by accelerating, stopping, or slowing.
- Adjust your lane position and/or direction of travel.

Apply the old saying "one step at a time" to handle two or more hazards. Adjust your speed so you can deal with each hazard separately. Then deal with them one at a time as single hazards. Decision-making becomes more complex with three or more hazards. Weigh the consequences of each and give equal distance to the hazards.

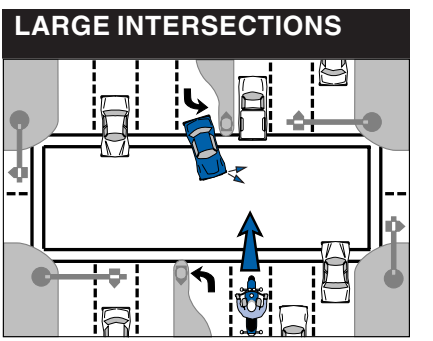
In high-risk areas, such as intersections, shopping areas, or school and construction zones, cover the clutch and both brakes to reduce your reaction time.

INTERSECTIONS

The greatest potential for conflict between you and other traffic is at intersections. An intersection is anywhere traffic may cross your path. It can be in the middle of an urban area or at a driveway on a residential street. Over one-half of motorcycle/passenger vehicle crashes are caused by drivers entering a rider's right-of-way. Vehicles that turn left in front of you, including those illegally turning left from the wrong lane, and cars on side streets that pull into your lane, are the biggest dangers. Your use of SEE at intersections is critical.

There are no guarantees that others will see you. Never count on "eye contact" as a sign that a driver will yield to you. Too often, a driver can look right at a motorcyclist and still fail to "see" him/her. The only eyes that you can count on are your own. If a vehicle can enter your path, assume that it will. Good riders are always "looking for trouble"—not to get into it, but to stay out of it.

Increase your chances of being seen at intersections. Ride with your headlight on in a lane position that provides you with



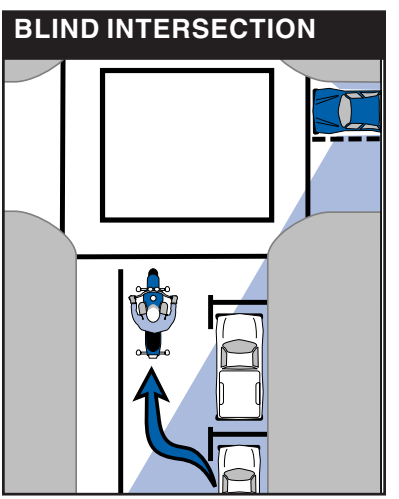
the best view of oncoming traffic. Maintain a space cushion around your motorcycle that permits you to take evasive action.

As you approach an intersection, select a lane position that increases your visibility to the driver. Cover the clutch and both brakes to reduce reaction time.

Reduce your speed as you approach an intersection. After entering the intersection, move away from vehicles preparing to turn. Do not change speed or position radically. The driver might think that you are preparing to turn.

Blind Intersections

When you approach a blind intersection, move to the portion of the lane that brings you into another driver's field of vision at the earliest possible moment. In this picture the rider has moved to the left portion of the lane—away from the parked car—so the driver on the cross street can see him/her as soon as possible.



If you have a stop sign or stop line, stop there first. Then edge forward and stop again, just short of where the cross-traffic lane meets your lane. From that position, lean your body forward and look around buildings, parked cars, or bushes to see if anything is coming. Make sure your front wheel stays out of the cross lane of travel while you are looking.

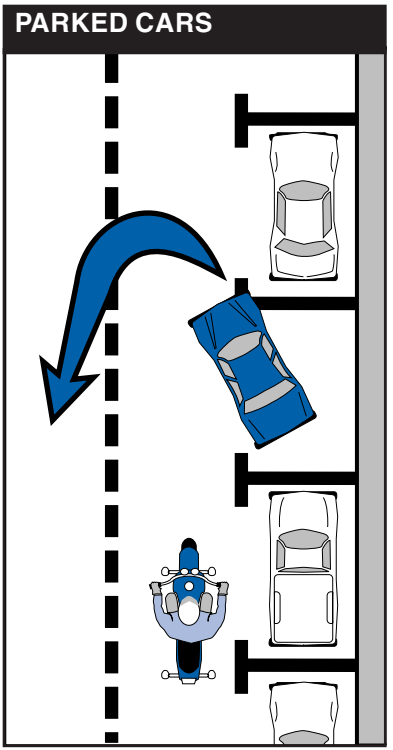
Passing Parked Cars

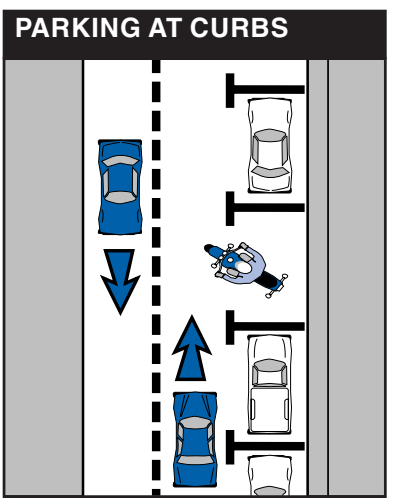
When passing parked cars, stay toward the left portion of your lane. This way, you can avoid problems caused by doors opening, drivers getting out of cars, or people stepping from between cars. If oncoming traffic is present, it is usually best to remain in the center portion of the lane to maximize your space cushion.

A bigger problem can occur if a driver pulls away from the curb without checking for traffic behind. Even if the driver looks, he/she may fail to see you.

In either event, the driver might enter your path. Slow down or change lanes to make room for someone to enter.

Vehicles making a sudden U-turn are the most dangerous. They may cut you off entirely, blocking the whole roadway and leaving





you with no place to go. Since you can't tell what a driver will do, slow down and get the driver's attention. Sound your horn and continue with caution.

Parking At The Roadside

Park at a 90° angle to the curb with the rear wheel touching the curb.

INCREASING VISIBILITY

In crashes with motorcyclists, drivers often say that they never saw the motorcycle. From ahead or behind, a motorcycle's outline is much smaller than a passenger vehicle's. Also, it's hard to see something you are not looking for, and most drivers are not looking for motorcycles. More likely, they are looking through the skinny, two-wheeled silhouette in search of cars that may pose a problem to them.

Even if a driver does see you coming, you aren't necessarily safe. Smaller vehicles appear farther away and seem to be traveling slower than they actually are. It is common for drivers to pull out in front of motorcyclists, thinking they have plenty of time. Too often, they are wrong.

However, you can do many things to make it easier for others to recognize you and your motorcycle.

Clothing

Most crashes occur in broad

daylight. Wear brightly-colored clothing to increase your chances of being seen. Remember, your body is half of the visible surface area of the rider/motorcycle unit.

Bright orange, red, yellow, or green jackets or vests are the best for being seen. Brightly colored helmets can also help others see you.

Reflective material on a vest and on the sides of the helmet will help drivers see you from the side. Reflective material can also be a big help for drivers coming toward you or from behind.

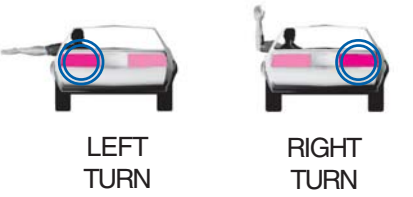
Headlight

The best way to help others see your motorcycle is to always keep the headlight on. Studies show that during the day, a motorcycle with its light on is twice as likely to be noticed. Using your high beam during the day and at night increases the chances that oncoming drivers will see you. Use your high beam it is legal and safe to do so. When it is foggy, use the low beam.

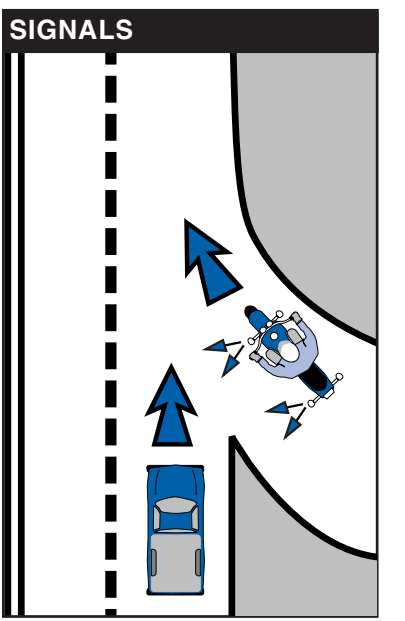
Turn Signals

The turn signals on a motorcycle are similar to those on a car. They tell others what you plan to do.

However, due to a rider's added vulnerability, turn signals are even more important. Use them anytime you plan to change lanes or turn. Signal your left or right turn during the last 100 feet before reaching the turning point.



At highway speeds, it is best to signal at least five seconds before changing lanes. Use your turn signals even when you think no one else is around. Your turn signals also make you easier to see. If bright sunlight makes your turn signal lights hard to see, use hand signals.



When you enter a freeway, drivers approaching from behind are more likely to see your turn signal blinking and make room for you.

Using your turn signals before each turn reduces confusion and frustration for the traffic around you. Once you turn, be sure to turn it off or a driver may pull directly into your path, thinking you plan to turn again.

Brake Light

Your motorcycle's brake light is usually not as noticeable as a vehicle's—especially when the taillight is on. If the situation permits, help others notice you by flashing your brake light before you slow down. It is especially important to flash your brake light before you slow:

- For a tight, fast turn off a high-speed highway.
- Where others may not expect it (in the middle of a block or at an alley).

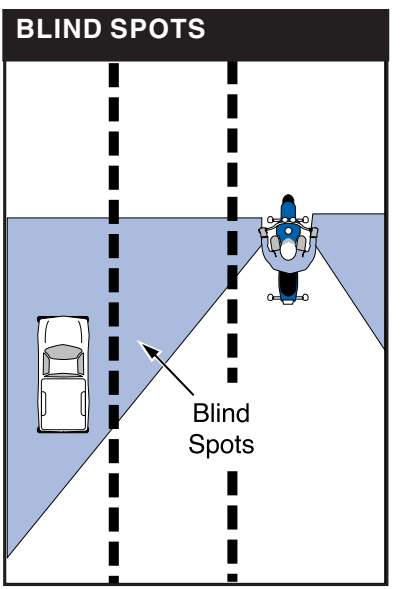
If you are being tailgated, it's a good idea to flash your brake light before you slow.

Using Your Mirrors

While it's most important to know what's happening ahead, you can't ignore situations behind you. Traffic conditions change quickly. In order to make safe decisions about how to handle trouble ahead, you must know what is going on behind you.

Frequent mirror checks should be part of your normal searching routine. Make a special point of using your mirrors:

- **When you are stopped** at an intersection. Watch cars coming up from behind. If the driver isn't paying attention, he could be on top of you before he sees you.
- **Before you change lanes**. Make sure no one is about to pass you.
- **Before you slow down**. The driver behind you may not expect you to slow, or may be unsure about where you will slow. For example, you signal a turn and the driver thinks you plan to turn at a distant intersection, rather than at a nearer driveway.



Some motorcycles have rounded (convex) mirrors. These mirrors provide a wider view of the road behind than do flat mirrors. They also make cars seem farther away than they really are. If you are not used to convex mirrors, you can get familiar with them by:

- Picking out a parked car in your mirror (while you are stopped).
- Forming a mental image of how far away it is.
- Then, turning around and looking to see how close you came.
- Practicing with your mirrors until you become a good judge of distance.
- Allowing extra distance before you change lanes.

Head Checks

Checking your mirrors is not enough. Motorcycles have "blind spots" just like other vehicles. Before you change lanes, turn your head and check that lane for other vehicles.

On a road with several lanes, check the far lane and the one next to you. A driver in the distant lane may drive into the same space you plan to take.

Frequent head checks should be part of your normal scanning routine. Only by knowing what is happening all around, can you be fully prepared to deal with it.

Horn

Be ready to use your horn to get someone's attention quickly. It is a good idea to give a quick beep before passing anyone that may move into your lane.

Here are some situations:

- A driver in the lane next to you is driving too closely to the vehicle ahead and may want to pass.
- A driver is seated in a parked car ahead.
- Someone is in the street riding a bicycle or walking.

In an emergency, press the horn button loud and long. Be ready to stop or swerve away from the danger.

Remember that a motorcycle's horn isn't as loud as a car's, so use it, but don't rely on it. Other strategies may be appropriate along with the horn.

Riding At Night

At night it is harder for you to see and be seen. Picking your motorcycle's headlight or taillight out of the other lights is not easy for drivers. To make up for this, you should:

- **Reduce Your Speed**. Ride even slower than you would during the day—particularly on roads you don't know well. This increases your chances of avoiding a hazard.
- **Increase Distance**. Distances are harder to judge at night than during the day. Your eyes rely upon shadows and light contrasts to determine how far away an object is and how fast

it is coming. These contrasts are missing or distorted at night. Open up a three-second or more following distance. Allow more distance to pass and be passed.

- **Use the Car Ahead**. The headlights of the car ahead can give you a better view of the road than your high beam. Taillights bouncing up and down can alert you to bumps or rough pavement.
- **Use Your High Beam**. Get all the light you can. Use your high beam whenever you are not following or approaching another vehicle. Be visible. Wear reflective materials when riding at night.
- **Be Flexible** about lane position. Change to the portion of the lane that helps you see, be seen, and keep an adequate space cushion.

CRASH AVOIDANCE

No matter how careful you are, there will be times when you find yourself in a tight spot. Your chances of getting out safely depend on your ability to react quickly and properly. Often, a crash occurs because a rider is not prepared or skilled in crash-avoidance maneuvers.

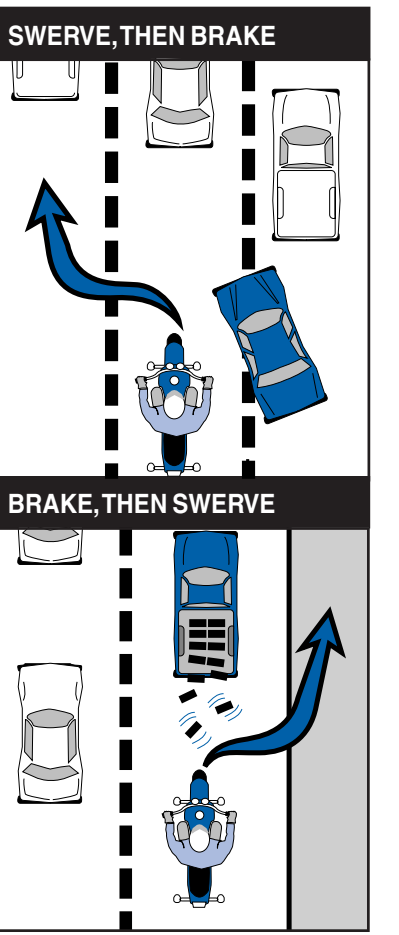
Two skills critical in avoiding a crash are knowing when and how to stop or swerve. You can't always stop quickly to avoid an obstacle. You must also be able to swerve around an obstacle.

Studies show that most crash-involved riders:

- Underbrake the front tire and overbrake the rear.
- Did not separate braking from swerving or did not choose to swerve when it was appropriate.

Quick Stops

To stop quickly, apply both brakes at the same time. Don't be



shy about using the front brake, but don't "grab" it either. Squeeze the brake lever firmly with continuing steady pressure. If the front wheel locks, release the front brake immediately and then reapply it firmly. At the same time, press down on the rear brake. If you accidentally lock the rear brake on a good traction surface, you can keep it locked until you have completely stopped.

NOTE: Even with a locked rear wheel, you can control the motorcycle on a straightaway if it is upright and going in a straight line.

Always use both brakes at the same time to stop. The front brake can provide almost three-quarters of your stopping power.

If you must stop quickly while turning or riding a curve, the best technique is to straighten the motorcycle first and then brake. However, it may not always be possible to straighten the motorcycle and then stop. If you must brake while leaning, apply the brakes lightly and reduce the throttle. As you slow, reduce your lean angle and apply more brake pressure until the motorcycle is straight and maximum brake pressure is possible. Then in the last few feet of stopping, you should "straighten" the handlebars. The motorcycle should now be straight up and in balance.

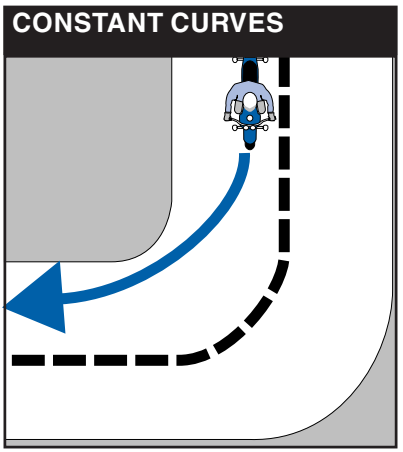
Swerving or Turning Quickly

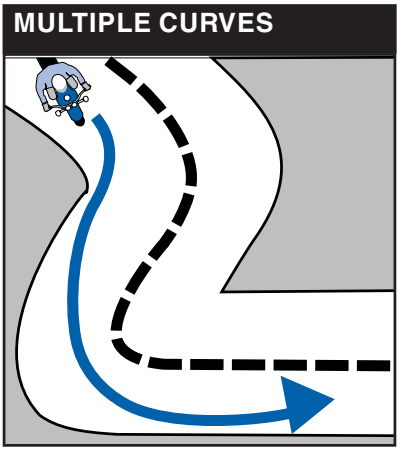
Sometimes you may not have enough room to stop, even if you use both brakes properly. An object might appear suddenly in your path. Or the car ahead might squeal to a stop. The only way to avoid a crash may be to turn quickly or swerve around it.

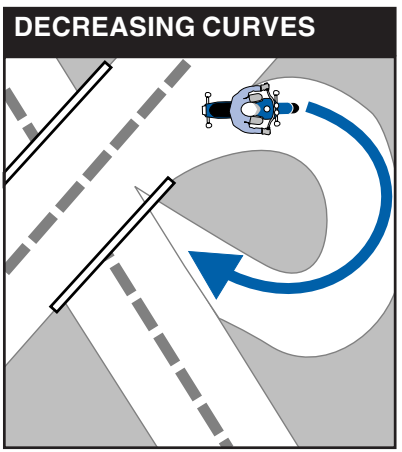
A swerve is any sudden change in direction. It can be two quick turns, or a rapid shift to the side. To swerve, apply a small amount of hand pressure to the handlegrip on the side of your intended direction of escape. This causes the motorcycle to lean quickly. The sharper the turn(s), the more the motorcycle must lean.

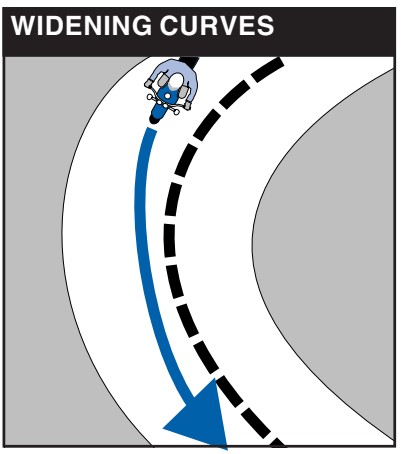
Keep your body upright and allow the motorcycle to lean in the direction of the turn. Keep your knees against the tank and your feet solidly on the pegs. Let the motorcycle move underneath you. Make your escape route the target of your vision. Press on the opposite handlegrip once you clear the obstacle and are ready to return to your original direction of travel. To swerve to the left, press the left handlegrip, then press the right to recover. To swerve to the right, press right, then left.

If braking is required, separate it from swerving. Brake before or after—never while swerving.









Cornering

A primary cause of single-vehicle crashes is motorcyclists running wide in a curve or turn and colliding with the roadway or a fixed object.

Every curve is different. Be alert to whether a curve remains constant, gradually widens, gets tighter, or involves multiple turns.

Ride within your skill level and posted speed limits. Your best path may not always follow the curve of the road.

Change your lane position based on traffic, road conditions, and curve of the road. If there is no traffic, start at the outside of a curve to increase your line of sight and the effective radius of the turn. As you turn, move toward the inside of the curve, and as you pass the center, move to the outside to exit.

Another choice is to move to the center of your lane before entering a curve and stay there until you exit. This allows you to see approaching traffic as soon as possible. You can also adjust for traffic "crowding" the center line or debris blocking part of your lane.

HANDLING DANGEROUS SURFACES

Your chance of falling or being involved in a crash increases whenever you ride across:

- Uneven surfaces or obstacles.
- Slippery surfaces.
- Railroad tracks or pavement seams.
- Grooves and gratings.

Uneven Surfaces and Obstacles

Watch for uneven surfaces such as bumps, broken pavement, potholes, or small pieces of highway trash.

Avoid obstacles by slowing or going around them. However, if you must go over the obstacle, first determine if it's possible. Approach it at as close to a 90° angle as possible. Look where you want to go to control your path of travel. If you have to ride over the obstacle, you should:

- Slow down as much as possible before contact.
- Make sure the motorcycle is straight.
- Rise slightly off the seat with your weight on the footpegs to absorb the shock with your knees and elbows and avoid being thrown off the motorcycle.
- Just before contact, roll on the throttle slightly to lighten the front end.

If you ride over an object, pull off the road and check your tires and rims for damage before riding any farther.

Slippery Surfaces

Motorcycles handle better on surfaces with good traction. Surfaces with poor traction include:

- **Wet pavement**, particularly just after it starts to rain and before surface oil washes to the side of the road.
- **Gravel roads** or where sand and gravel collect.
- **Mud, snow, and ice**.
- **Lane markings**, steel plates, and manhole covers especially when wet.

To ride safely on slippery surfaces:

- **Reduce Speed**. Slow down before you get to a slippery surface to reduce your chances of skidding. When slippery, your motorcycle needs more distance to stop. It is especially important to reduce speed before entering wet curves.
- **Avoid Sudden Moves**. Any

sudden change in speed or direction can cause a skid. Be as smooth as possible when you speed up, shift gears, turn, or brake.

- **Use Both Brakes**. The front brake is still effective, even on a slippery surface. Squeeze the brake lever gradually to avoid locking the front wheel. Remember, gentle pressure on the rear brake.
- **Remember That the Center of a Lane Can be Hazardous When Wet.** When it starts to rain, ride in a vehicle's tire tracks. Often, the left tire track will be the best lane position, depending on traffic and other road conditions as well.
- **Watch For Oil Spots** when you put your foot down to stop or park. You may slip and fall.
- **Be Cautious of the Edge of the Road**. Dirt and Gravel collect along the sides of the road especially on curves and ramps leading to and from highways.
- **Remember Rain Dries and Snow Melts Faster on Some Sections of a Road** than on others. Patches of ice tend to develop in low or shaded areas and on bridges and overpasses. Wet leaves are just as slippery as wet road surfaces. Ride on the least slippery portion of the lane and reduce your speed.

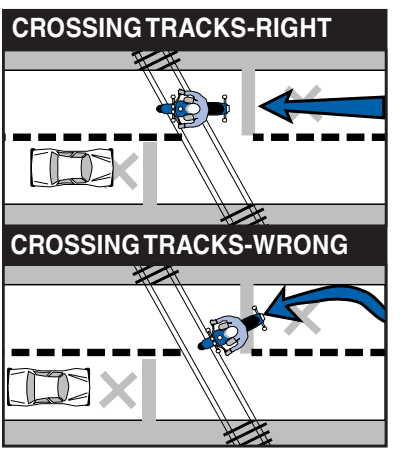
Cautious riders steer clear of roads covered with ice or snow.

If you can't avoid an icy or snowy surface, keep your motorcycle straight up and proceed as slowly as possible. If you encounter a large surface so slippery that you must coast, or travel at a walking pace, consider letting your feet skim along the surface. If the motorcycle starts to fall, you can catch yourself. Be sure to keep off the brakes. If possible, squeeze the clutch and coast. Attempting this maneuver at anything other than the slowest of speeds could prove hazardous.

Railroad or Trolley Tracks and Pavement Seams

Usually it is safer to ride straight within your lane to cross tracks. Turning to take tracks head-on (at a 90° angle) can be more dangerous because your path may carry you into another lane of traffic.

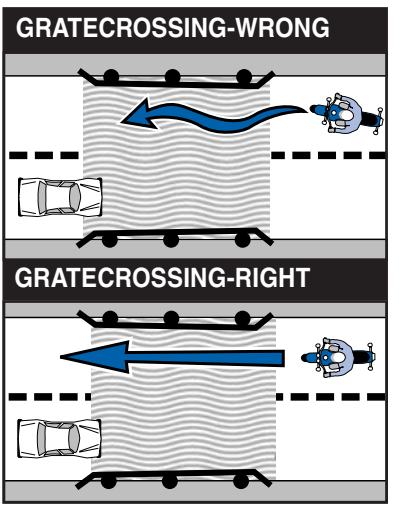
For track and road seams that run parallel to your course, move far enough away from tracks, ruts, or



pavement seams to cross at an angle of at least 45°. Then, make a quick, sharp turn. Edging across could catch your tires and throw you off balance.

Groove and Gratings

Riding over rain grooves or bridge gratings may cause your motorcycle to weave. This uneasy, "wandering" feeling is generally not hazardous. Relax and maintain a steady speed and ride straight across. Crossing at an angle forces riders to zigzag to stay in the lane. The zigzag is far more hazardous than the wandering feeling.



MECHANICAL PROBLEMS

You can find yourself in an emergency the moment something goes wrong with your motorcycle. In dealing with any mechanical problem, take into account the road and traffic conditions you face. Here are some guidelines that can help you handle mechanical problems safely.

Tire Failure

You will seldom hear a tire go flat. If the motorcycle starts handling differently, it may be a tire failure. You must be able to tell from the way the motorcycle reacts if you have tire failure. If one of your tires suddenly loses air, react quickly to keep your balance. Stop riding and check the tires as soon as possible.

If the front tire goes flat, the steering will feel "heavy." A front-wheel flat is particularly hazardous because it affects your steering. You have to steer well to keep your balance.

If the rear tire goes flat, the back of the motorcycle may jerk or sway from side to side.

If either tire goes flat while riding:

- Hold the handlegrips firmly, ease off the throttle, and keep a straight course.
- If braking is required, gradually apply the brake of the tire that isn't flat, if you are sure which one it is.
- When the motorcycle slows, ride to the side of the road, squeeze the clutch, and stop.

Stuck Throttle

Twist the throttle back and forth

several times. If the throttle cable is stuck, this may free it. If the throttle stays stuck, immediately operate the engine cut-off switch and pull in the clutch at the same time. This will remove power from the rear wheel, though engine noise may not immediately decline. Once the motorcycle is "under control," leave the road and stop.

After you have stopped, check the throttle cable carefully to find the trouble. Make certain the throttle works freely before you start riding again.

Wobble

A "wobble" occurs when the front wheel and handlebars suddenly start to shake from side to side at any speed. Most wobbles can be traced to improper loading, unsuitable accessories, or incorrect tire pressure. If you are carrying a heavy load, lighten it. If you can't lighten the load, shift it. Center the weight lower and farther forward on the motorcycle. Make sure the tire pressure, spring pre-load, air shocks, and dampers are at the recommended settings for that much weight. Make sure windshields and fairings are mounted properly.

Check for poorly adjusted steering, worn steering parts, a front wheel that is bent, misaligned, or out of balance, loose wheel bearings or spokes, and swingarm bearings. If none of these are the cause, have the motorcycle thoroughly checked by a qualified professional.

Trying to "accelerate out of a wobble" will only make the motorcycle more unstable. Instead:

- Grip the handlebars firmly, but don't fight the wobble.
- Close the throttle gradually to slow down. Do not apply the brakes; braking could make the wobble worse.
- Move your weight as far forward and down as possible.
- Leave the road as soon as you can to fix the problem.

Chain Problems

A chain that slips or breaks while you're riding could lock the rear wheel and cause your motorcycle to skid. Chain slippage or breakage can be avoided by proper maintenance.

- **Slippage**. If the chain slips when you try to speed up or ride uphill, pull off the road. Check the chain and sprockets. Tightening the chain may help. Replace the chain, the sprockets, or both before riding again, if needed.
- **Breakage**—You'll notice an instant loss of power to the rear wheel. Close the throttle and brake to a stop.

Engine Seizure

When the engine "locks" or "freezes" it is usually low on oil.

If the engine's moving parts can't move smoothly against each other, the engine overheats. The first sign may be a loss of engine power or a change in the engine's sound. Squeeze the clutch lever to disengage the engine from the rear wheel. Pull off the road and stop. Check the oil. If needed, add oil as soon as possible or the engine will seize. When this happens, the effect is the same as a locked rear wheel. Let the engine cool before restarting.

ANIMALS

Do everything you safely can do to avoid hitting an animal. If you are in traffic, however, remain in your lane. Hitting something small is less dangerous to you than hitting something big—like a car.

Motorcycles seem to attract dogs. If you are chased, downshift and approach the animal slowly. As you approach it, accelerate away and leave the animal behind. Don't kick at an animal. Keep control of your motorcycle.

For larger animals (deer, elk, cattle) brake and prepare to stop—they are unpredictable.

FLYING OBJECTS

From time to time riders are struck by insects, cigarettes thrown from vehicles, or pebbles kicked up by the tires of the vehicle ahead. If you are wearing face protection, it might get smeared or cracked, making it difficult to see. Without face protection, an object could hit you in the eye, face, or mouth. Whatever happens, keep your eyes on the road and your hands on the handlebars. When safe, pull off the road and repair the damage.

GETTING OFF THE ROAD

If you need to leave the road to check the motorcycle (or just to rest for a while), be sure you:

- **Check the roadside**. Make sure the roadside is firm enough to ride on. If it is soft grass, loose sand, or if you're just not sure about it, slow way down before you turn onto it.
- **Signal**. Drivers behind might not expect you to slow down. Give a clear signal that you will be slowing and changing direction. Check your mirror and make a head check before you take any action.
- **Pull off the road**. Get as far off the road as you can. It can be very hard to see a motorcycle by the side of the road. You don't want someone else leaving the road at the same place you are.
- **Park carefully**. Loose and sloped shoulders can make setting the side or center stand difficult.

CARRYING PASSENGERS AND CARGO

Only experienced riders should carry passengers or large loads. The extra weight changes the way the motorcycle handles, balances, speeds up, and slows down. Before taking a passenger or a heavy load on the street, practice away from traffic.

Equipment

To carry passengers safely:

- Equip and adjust your motorcycle to carry passengers.
- Instruct the passenger before you start.
- Adjust your riding technique for the added weight.

Equipment should include:

- A proper seat large enough to hold both of you without crowding. You should not sit any farther forward than you usually do.
- Footrests for the passenger. Firm footing prevents your passenger from falling off and pulling you off, too.
- Protective equipment should be the same protective gear recommended for operators.

Adjust the suspension to handle the additional weight. You will probably need to add a few pounds of pressure to the tires if you carry a passenger. (Check your owner's manual for appropriate settings.) While your passenger sits on the seat with you, adjust the mirror and headlight according to the change in the motorcycle's angle.

Instructing Passengers

Even if your passenger is a motorcycle rider, provide complete instructions before you start. Tell your passenger to:

- Get on the motorcycle only after you have started the engine.
- Sit as far forward as possible without crowding you.
- Hold firmly to your waist, hips, or belt.
- Keep both feet on the pegs, even when stopped.
- Keep legs away from the muffler(s), chains, or moving parts.
- Stay directly behind you leaning as you lean.
- Avoid unnecessary talk or motion.

Also, tell your passenger to tighten his or her hold when you:

- Approach surface problems.
- Are about to start from a stop.
- Warn that you will make a sudden move.

Riding With Passengers

Your motorcycle will respond more slowly with a passenger. The heavier your passenger, the longer it will take to slow down and speed up—especially on a light-duty motorcycle.

- Ride a little slower, especially when taking curves, corners, or bumps.
- Begin slowing sooner as you approach a stop.
- Open up a larger cushion of space ahead and to the sides.
- Wait for larger gaps to cross, enter, or merge with traffic.

Warn your passenger of these special conditions: Starting, stopping quickly, turning sharply, or riding over bumps. Turn your head slightly to make yourself understood, but keep your eyes on the road ahead.

Carrying Loads

Most motorcycles are not designed to carry much cargo. Small loads can be carried safely, if positioned and fastened properly.

- **Keep the Load Low**. Fasten loads securely, or put them in saddlebags. Stacking loads against a sissybar or frame on the back of the seat raises the motorcycle's center of gravity and shifts its balance.
- **Keep the Load Forward**. Place the load over, or in front of, the rear axle. Tank bags keep loads forward, but use caution when loading hard or sharp objects. Make sure the tank bag does not interfere with handlebars or controls. Mounting a load behind the rear axle affects how the motorcycle turns and brakes. It can also cause a wobble.
- **Distribute the Load Evenly**. Load saddlebags with about the same weight. An uneven load can cause the motorcycle to drift to one side.
- **Secure the Load**. Fasten the load securely with elastic cords (bungee cords or nets). Elastic cords with more than one attachment point per side are more secure. A tight load won't catch in the wheel or chain, causing it to lock up and skid. Ropes tend to stretch and knots can come loose, permitting the load to shift or fall.
- **Check the Load**. Stop and check the load often to make sure it has not worked loose or moved.

GROUP RIDING

If you ride with others, do it in a way that promotes safety and doesn't interfere with the flow of traffic.

Keep the Group Small

Small groups make it easier and safer for other drivers to get around them. A small number isn't separated as easily by traffic or red lights. Some riders won't always be hurrying to catch up. If your group is larger than four or five riders, divide it into two or more smaller groups.

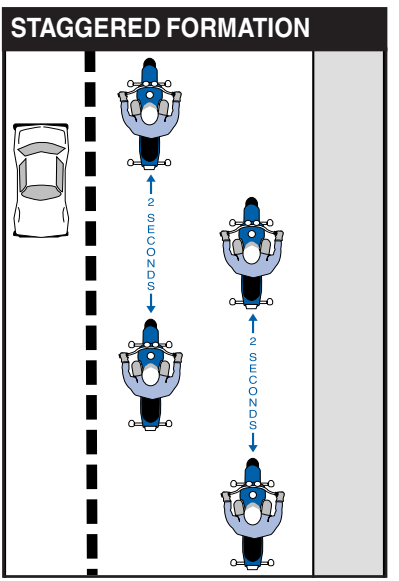
Keep the Group Together

- **Plan**. The leader should look ahead for changes and signal early so there is plenty of time for everyone to follow. Start lane changes early to permit everyone to complete the lane change safely.
- **Put Beginners Up Front**. Place inexperienced riders behind the leader so the more experienced riders can watch them.
- **Follow Those Behind**. Let the last rider set the pace. Use your mirrors to keep an eye on the person behind. If a rider falls behind, everyone should slow down a little to stay together.
- **Know the Route**. Make sure everyone knows the route. Then, if someone is separated he/she won't have to hurry to keep from getting lost or taking a wrong turn. Plan frequent stops on long rides.

Keep Your Distance

Maintain close ranks but at the same time keep a safe distance to allow each rider in the group time and space to react to hazards. A close group takes up less space on the highway, is easier to see, and is less likely to be separated. However, it must be done properly.

- **Don't Pair Up**. Never operate directly alongside another rider. There is no place to go to avoid a car or a hazard on the road. To talk, wait until you are both stopped.
- **Staggered Formation**. This is the best way to keep ranks close yet maintain an adequate space cushion. The leader rides in the left portion of the lane while the second rider stays one second behind in the right portion of the lane. A third rider rides in the left portion of the lane two seconds behind the first rider. The fourth rider keeps a two-second distance behind the second rider. This formation keeps the group close and permits each rider a safe distance from others ahead, behind, and to the sides.
  - —Passing in Formation. Riders in a staggered formation should pass one at a time.
  - —First, the lead rider pulls out and passes when safe. After passing, the leader returns to the left portion of the



lane and continues riding at "passing speed" to open room for the next rider.

—After the first rider passes safely, the second rider moves up to the left portion of the lane and watches for a safe chance to pass. After passing, this rider returns to the right portion of the lane and opens up room for the next rider.

Some people suggest that the leader should move to the right portion of the lane after passing a vehicle. This is not a good idea. It encourages the second rider to pass and return to the lane before there is a large enough space cushion in front of the passed vehicle. It's simpler and safer to wait until there is enough room ahead of the passed vehicle to allow each rider to move into the same position held before the pass.

- **Single-File Formation**. Move into a single-file formation when riding curves, turning, or entering or leaving a highway.

BEING IN SHAPE TO RIDE

Riding a motorcycle is a demanding and complex task. Skilled riders pay attention to their riding environment and to operating the motorcycle, identifying potential hazards, making good judgments, and executing decisions quickly and skillfully. Your ability to perform and respond to changing road and traffic conditions is influenced by how fit and alert you are. Alcohol and other drugs, more than any other factor, affect your ability to think clearly and to ride safely. As little as one alcoholic drink can have a significant effect on your performance.

BLOOD ALCOHOL CONCENTRATION

Blood alcohol concentration or BAC is the amount of alcohol in relation to blood in the body. Generally, alcohol can be eliminated in the body at the rate of almost one drink per hour. But a variety of other factors may also influence the level of alcohol retained. The more alcohol in your blood, the greater the degree of impairment.

Three factors play a major part in determining BAC:

- The amount of alcohol you consume.
- How fast you drink.
- Your body weight.

"One drink" is a 1 1/2-ounce shot of 80-proof liquor (even if mixed with non-alcoholic drinks), a 5-ounce glass of 12% wine, or a 12-ounce glass of 5% beer. These "one drink" equivalents change if you drink ale, malt liquors, or fortified wines or if you drink on an empty stomach, are tired, sick, upset, or have taken medicines or drugs.

The faster you drink, the more alcohol accumulates in your body. If you drink two drinks in an hour, at the end of that hour, at least one drink will remain in your bloodstream.

ALCOHOL AND THE LAW

In California, a person with a BAC of .08% or above is considered intoxicated. It doesn't matter how sober you may look or act. A breath or blood test is what usually determines whether you are riding legally or illegally.

IMPORTANT: You cannot legally purchase beer, wine, or hard liquor if you are under the age of 21. The law is very strict if you are under 21 and drive with a BAC that is 0.01% or more. (VC §23136) The *California Driver Handbook* has more information.

Your chances of being stopped for riding under the influence of alcohol are increasing. Law enforcement is being stepped up across the country in response to the senseless deaths and injuries caused by drinking drivers and riders.

MINIMIZE THE RISKS

Minimize the risks of drinking and riding by taking the following steps:

Don t Drink. Once you start, your resistance becomes weaker.

Or Don t Ride. If you haven t controlled your drinking, you must control your riding.

FATIGUE

Riding a motorcycle is more tiring than driving a car especially on a long trip. Avoid riding when tired. Fatigue can affect your control of the motorcycle.

- **Protect yourself from the elements**. Wind, cold, and rain make you tire quickly. Dress warmly. A windshield is worth its cost if you plan to ride long distances.
- **Limit your distance**. Experienced riders seldom try to ride more than about six hours a day.
- **Take frequent rest breaks**. Stop and get off the motorcycle at least every two hours.
- **Don't drink alcohol or use drugs.** Artificial stimulants often result in extreme fatigue or depression as they start to wear off. You won't be able to concentrate on the task at hand.

MOTORCYCLE INSURANCE FACTS

The financial responsibility sections of the *Vehicle Code* apply to all two-wheel vehicle owners and operators.

If you, as an operator, are involved in an accident which causes more than $750 in property damage to one person, including yourself, or in which anyone, including yourself, is injured, no matter how slightly,

you or your insurance agent, broker, or legal representative must report the accident to DMV. The CHP or police will not make this report.

You must make this report within 10 day on the Traffic Accident Report (SR1) form. You can get this form from any DMV or CHP office. This form is also available on DMV's web site at *www.dmv.ca.gov*. Refer to the *California Driver Handbook* for more information.

Check with your insurance company about your coverage before you buy or ride a motorcycle.

TREAD LIGHTLY!

The U.S. Forest Service (USFS), Bureau of Land Management (BLM), and California Department of Parks and Recreation would like you to TREAD LIGHTLY!

HOW TO TREAD LIGHTLY

- **Obtain a Travel Map** from your local USFS or BLM office, or regulations from other public land agencies. Learn the rules and follow them.
- **Avoid running over young trees**, shrubs, and grasses—this can damage or kill them.
- **Stay off soft, wet roads** and trails readily torn up by vehicles.
- **Travel around meadows**, steep hillsides, or stream banks and lake shores easily scarred by churning wheels.
- **Resist the urge to pioneer** a new road or trail, or to cut across a switchback.
- **Stay away from wild animals** that are rearing young—or suffering from food shortages. The stress uses up their limited energy reserves.
- **Obey gate closures** and regulatory signs.
- **Stay out of designated wilderness areas**. Know where the boundaries are. Vandalism costs tax dollars.
- **Get permission to travel** across private lands. Respect landowner rights.

DISCLAIMER

This handbook is only a summary of the laws and regulations. DMV, law enforcement, and courts follow the full and exact language of the law contained in the California *Vehicle Code*. You may buy a copy of the *Vehicle Code* at any DMV office or visit our website at www.dmv.ca.gov.

WHERE TO WRITE

If you have any suggestions or comments regarding this handbook, please write to:

Department of Motor Vehicles
Customer Communications Unit M/S: C165
P.O. Box 932345
Sacramento, CA 94232-3450

OSP 05 88433

DMV After Hours

Many DMV transactions can be handled from home

Call 1-800-777-0133
or visit
www.dmv.ca.gov

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- Request DMV forms, Handbooks and Fast Facts and How-To brochures
- Hear answers to frequently asked questions
- General information about vehicle registration and driver licensing requirements

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www.dmv.ca.gov
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- Appointments for vehicle registration or driver license (except driving tests)
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- Obtain general information about: vehicle registration; driver licensing requirements; driver safety; businesses which DMV is responsible for licensing; registering to vote; how to access other government agencies.
- Download DMV forms and handbooks
- Take interactive sample driver license exams
- Obtain answers to frequently asked questions

Congratulations California!

More than 130 million gallons of motor oil are sold each year. Instead of dumping it in the trash, yard, or storm drains, you can keep it out of California's water, soil, and landfills. That protects our natural resources, generates more used oil to re-refine, and reduces water pollution—and that saves us all money.

To learn about California's used oil recycling program, visit the Integrated Waste Management Board at *www.ciwmb.ca.gov/UsedOil/*. To find where you can drop off your used oil and filters, call 1-800-CLEANUP.

Recycle Used Motor Oil And Oil Filters

For your local collection center call:

1-800-CLEANUP

California Environmental Protection Agency
Integrated Waste Management Board

Zero Waste — You Make It Happen!

This isn't the only protection you need if you drive a motorcycle.

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